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Moya Kinnealey
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mark A. Exley et al. Art Unit: 3146
Serial No.: 09/885,768 Examiner: Not Yet Assigned
Filed: June 19, 2001 Customer No.: 21559
Title: Compositions and Methods of Monoclonal and Polyclonal Antibodies Specific for T Cell Subpopulations

Assistant Commissioner For Patents
Washington, D.C. 20231

TRANSMITTAL OF SUBSTITUTE DRAWINGS TO OFFICIAL DRAFTSPERSON

In reply to the Notice To File Missing Parts that was mailed in the above-captioned case on August 14, 2001 enclosed are:

☒ 40 sheets of substitute drawings that replace the informal drawings filed with the application.

If there are any other charges or any credits, please apply them to Deposit Account

No. 03-2095.

Respectfully submitted,

Date:

December 3, 2001

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\\Clark-w2k1\documents\01948\01948.074002 Transmittal of formal drawings.wpd



21559
PATENT TRADEMARK OFFICE

FIG. 1

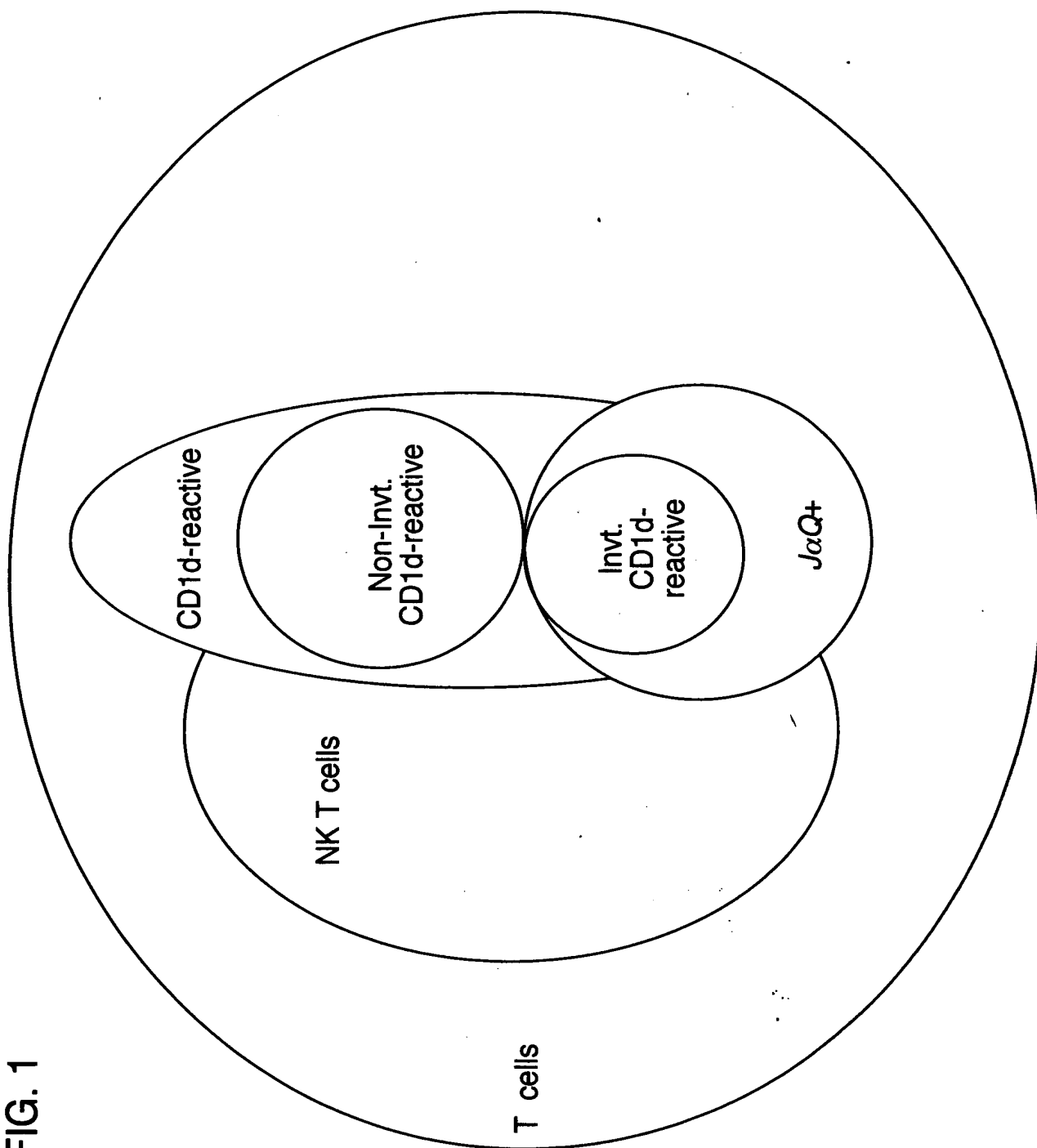


FIG. 2A

Control T-cell

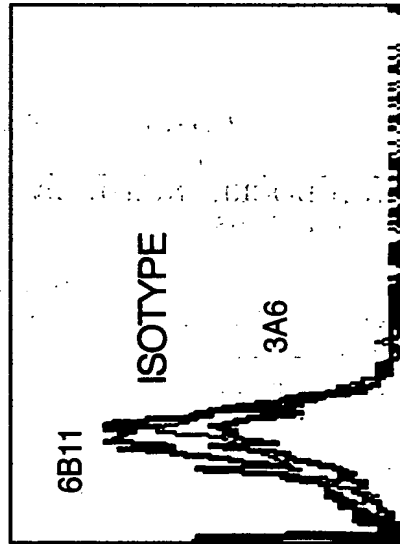


FIG. 2B

Invariant T-cell

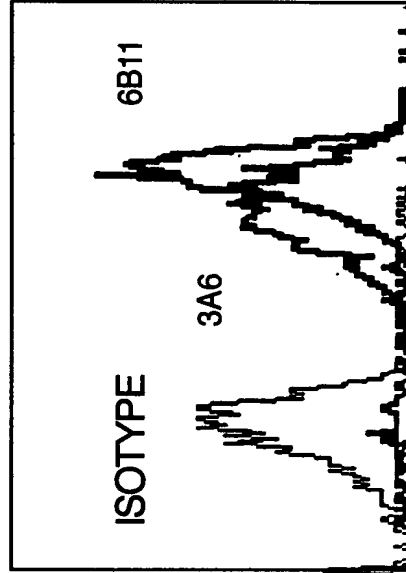


FIG. 3A

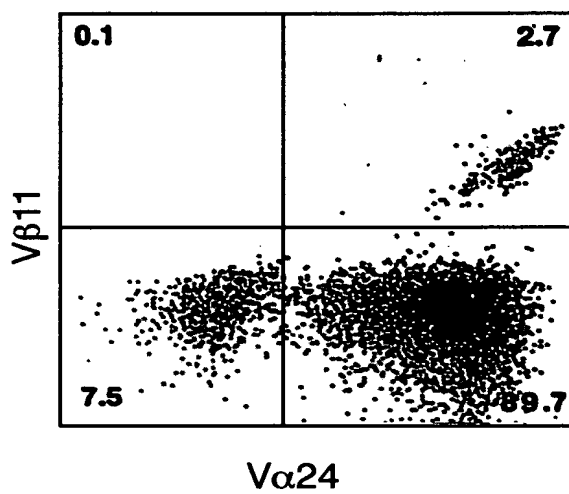


FIG. 3B

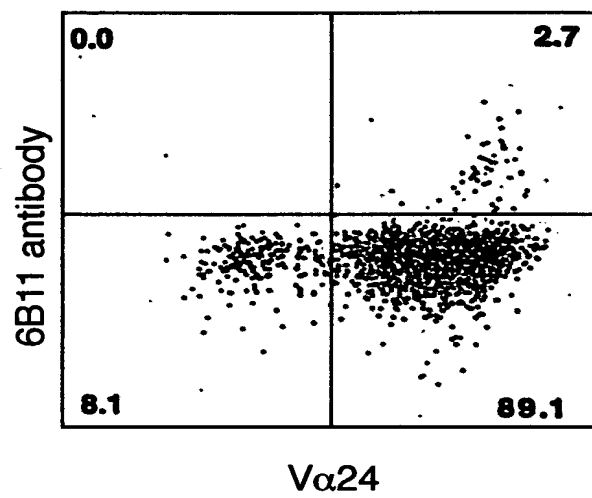


FIG. 4A

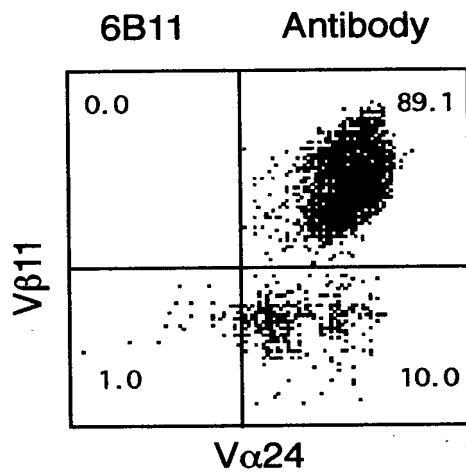


FIG. 4B

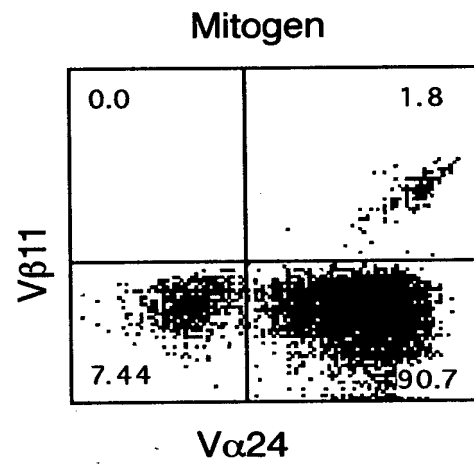


FIG. 5A

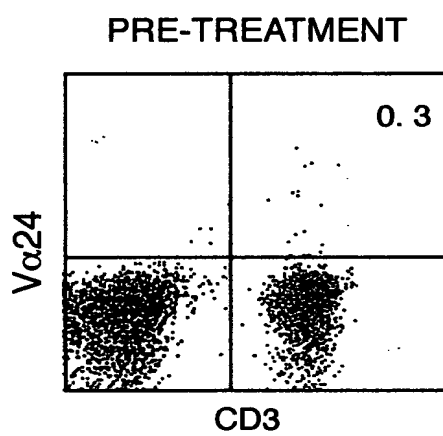


FIG. 5B

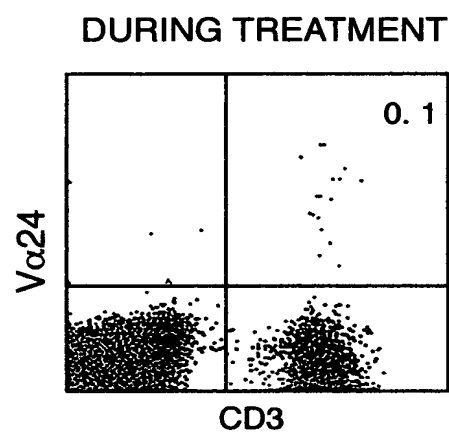


FIG. 6A

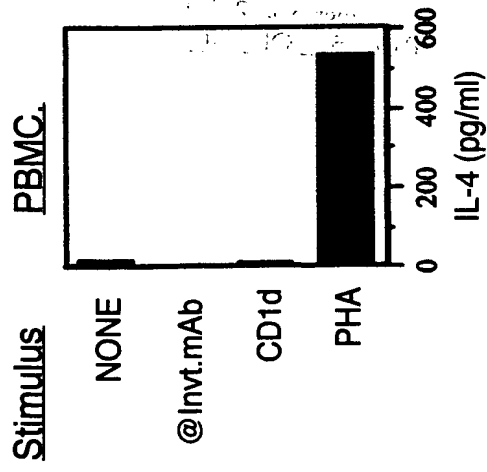


FIG. 6B

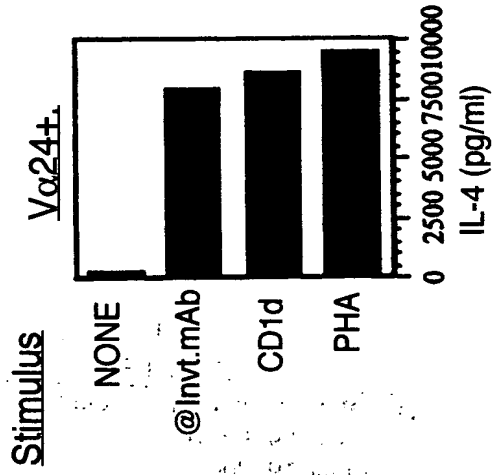


FIG. 6C

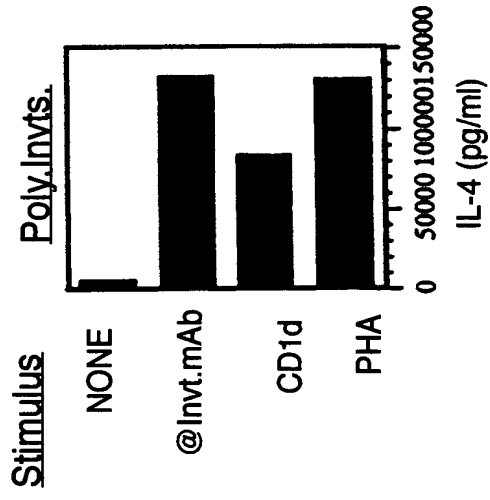


FIG. 7A

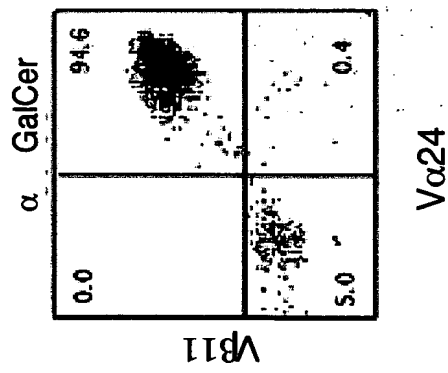


FIG. 7B

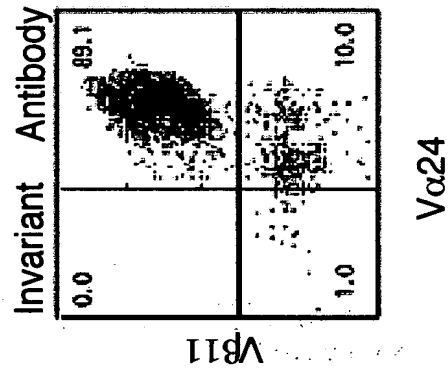
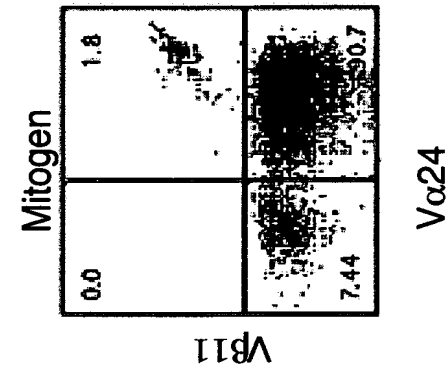


FIG. 7C



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FIG. 8A

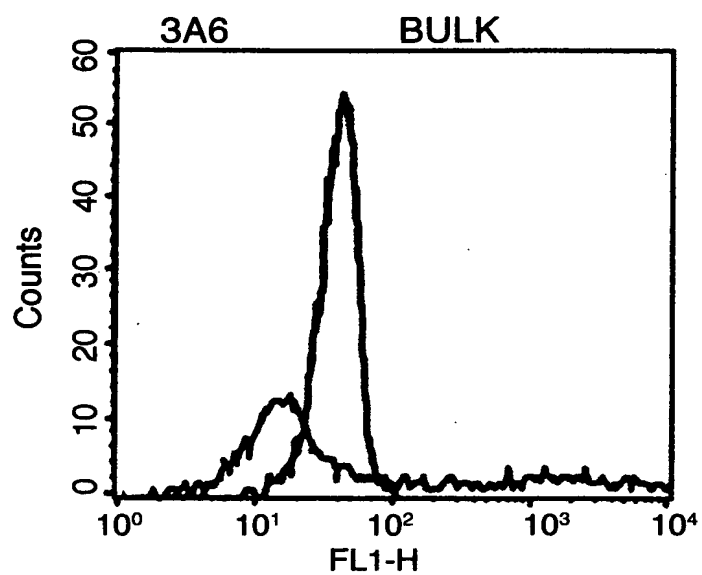


FIG. 8B

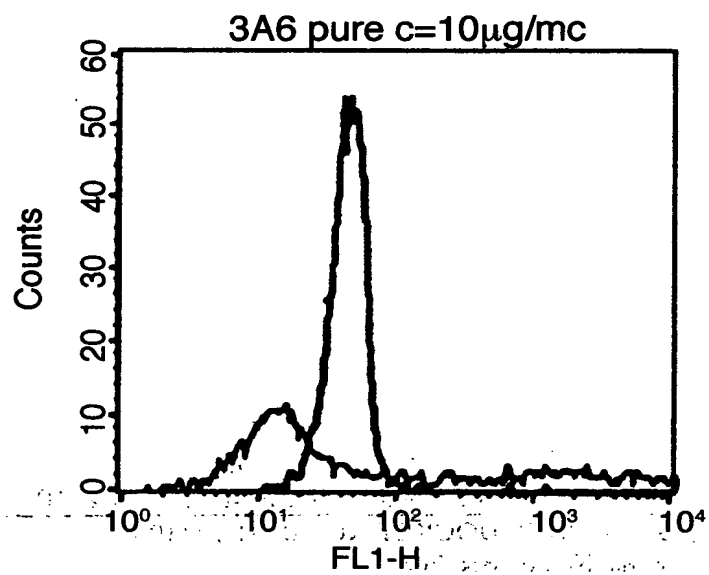
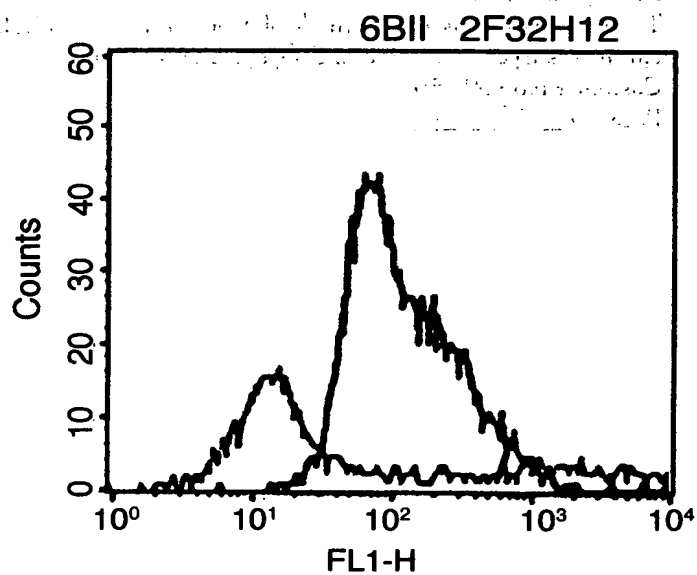


FIG. 8C



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FIG. 8D

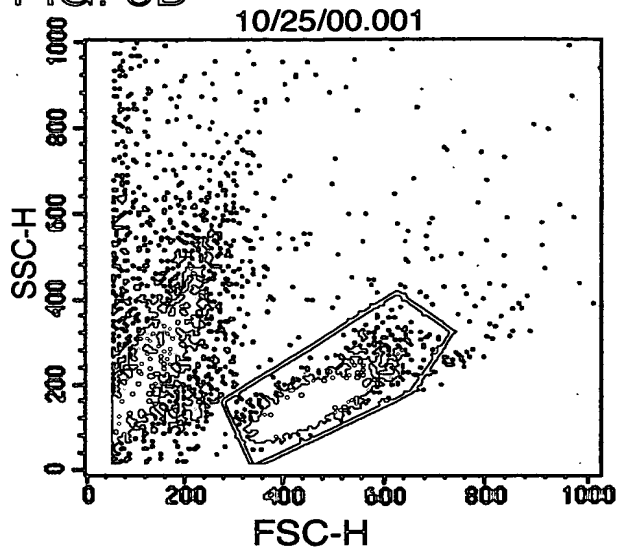


FIG. 8G

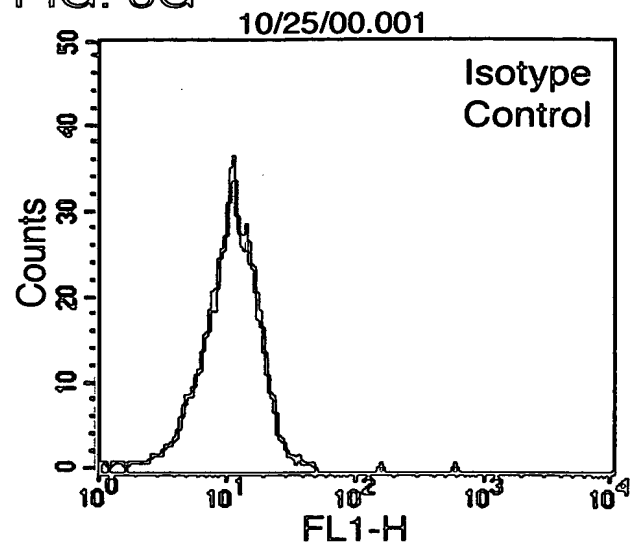


FIG. 8E

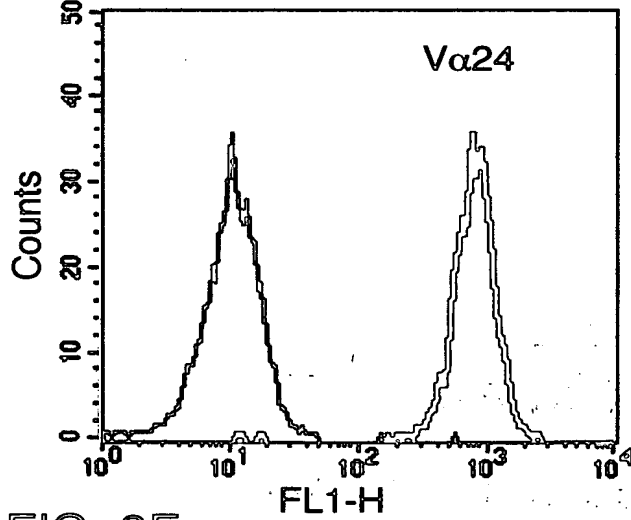


FIG. 8H

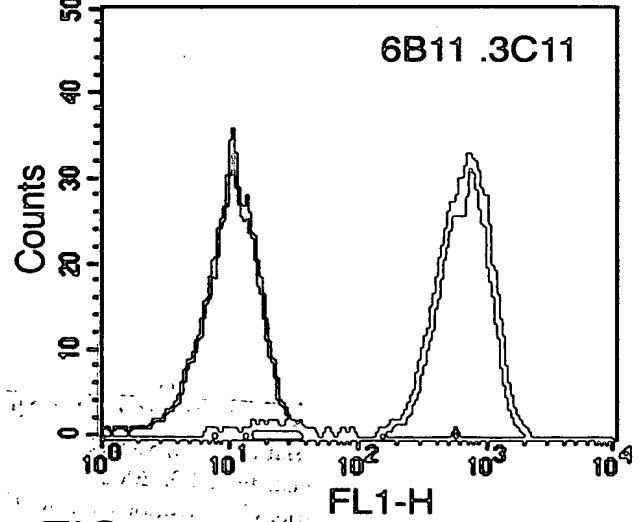


FIG. 8F

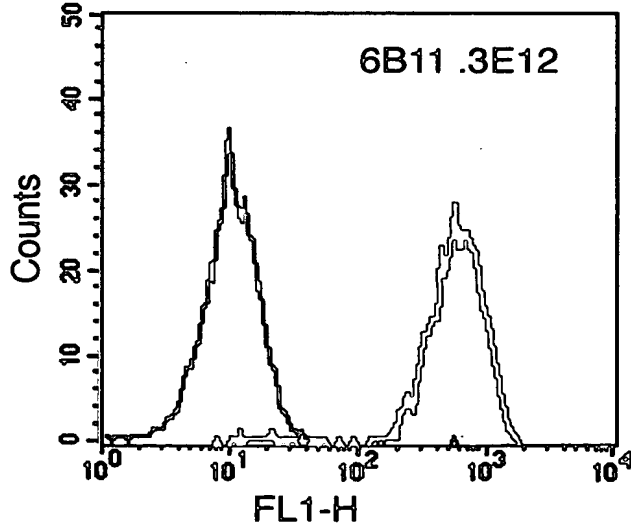
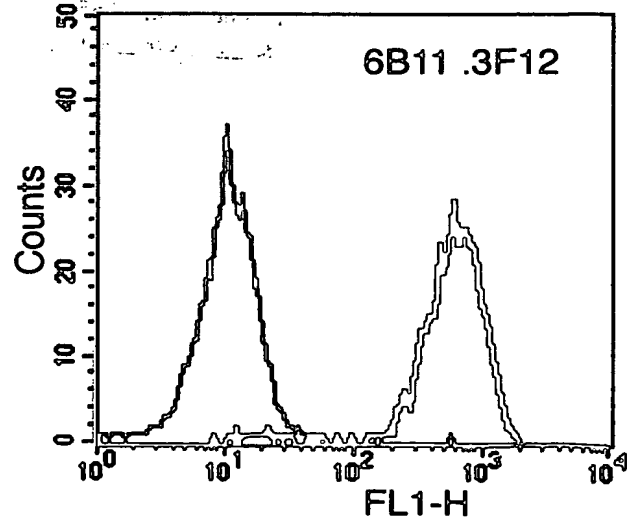
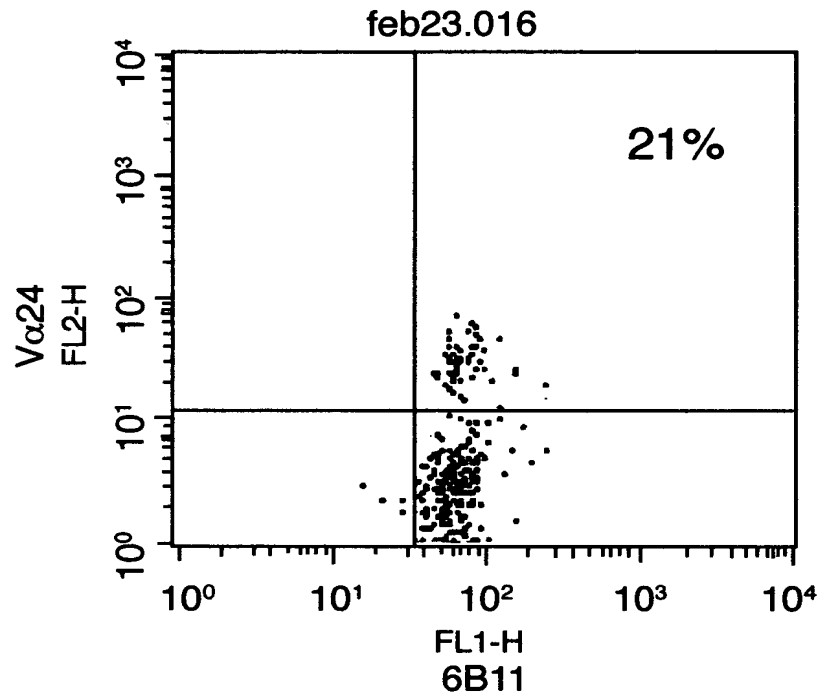


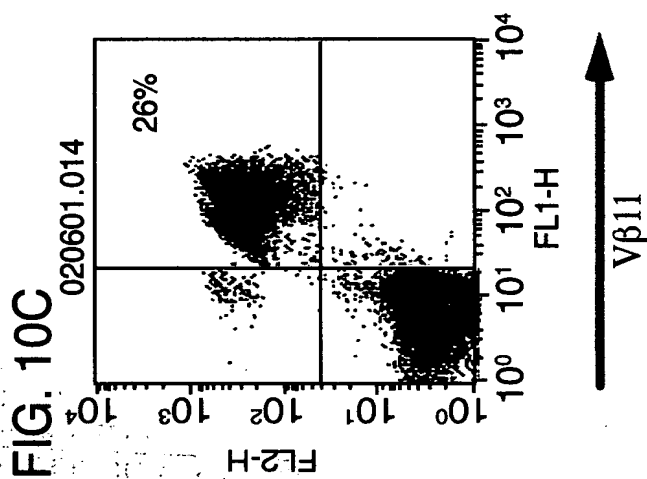
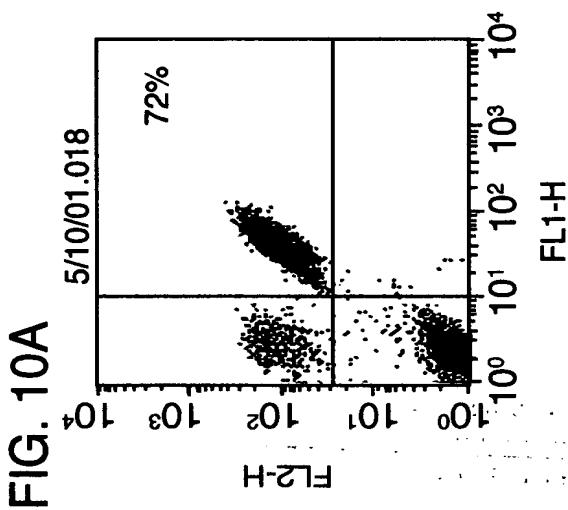
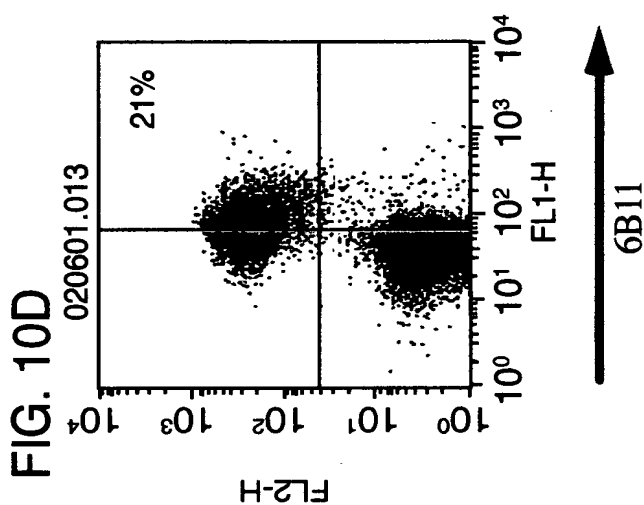
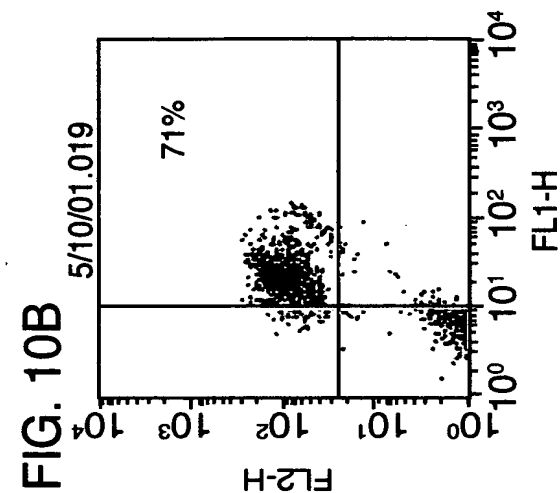
FIG. 8I



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FIG. 9





6B11-Miltenvi#1
+TCM alone

6B11-Miltenvi#2
+TCM alone

Vα24

FIG. 10F

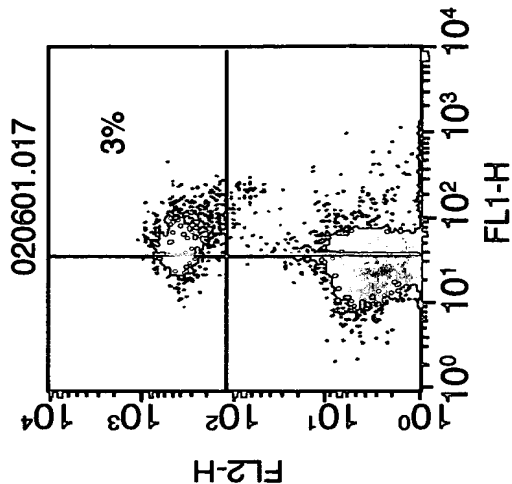


FIG. 10H

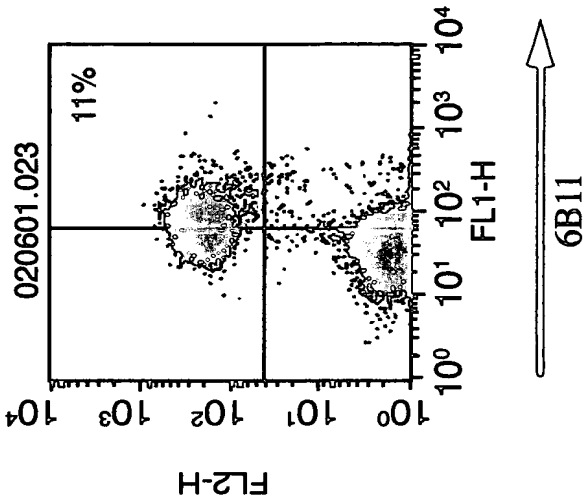


FIG. 10E

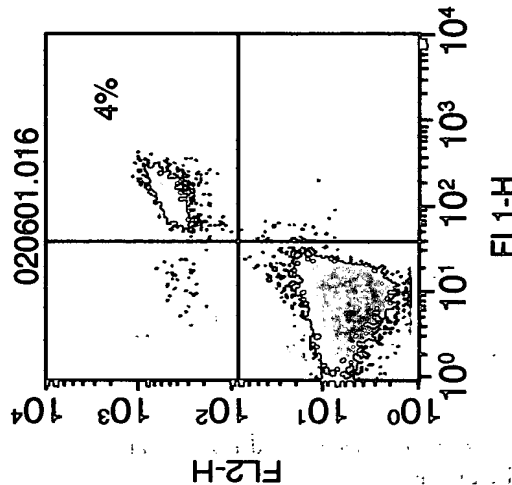
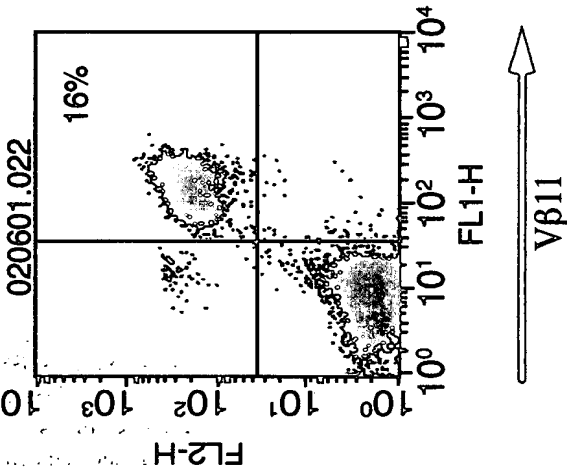


FIG. 10G



6B11-Miltenvi#2
±ICM+Dexamethasone

Vα24

6B11-Miltenvi#2
±ICM+IL-7+IL-15

FIG. 11A

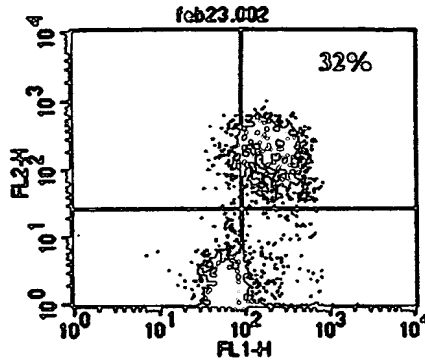


FIG. 11B

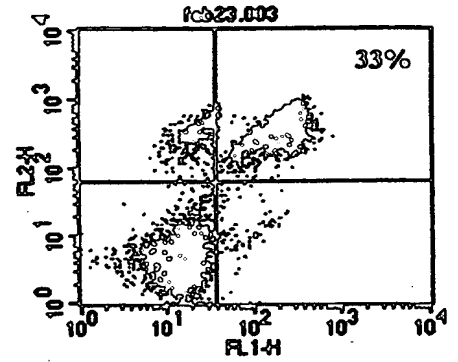


FIG. 11C

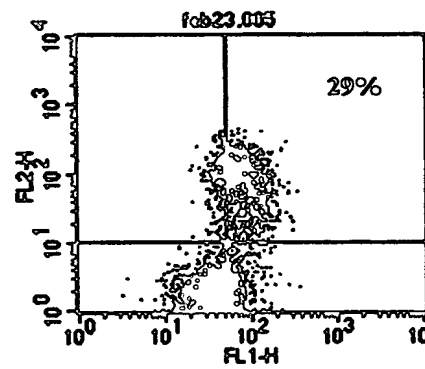


FIG. 11D

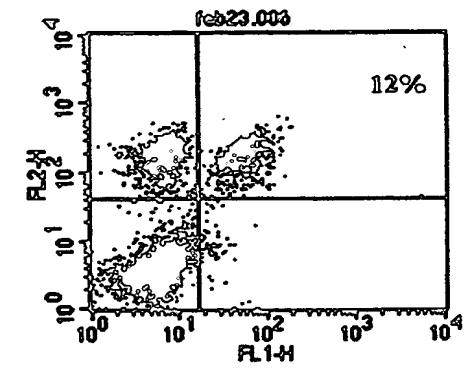


FIG. 11E

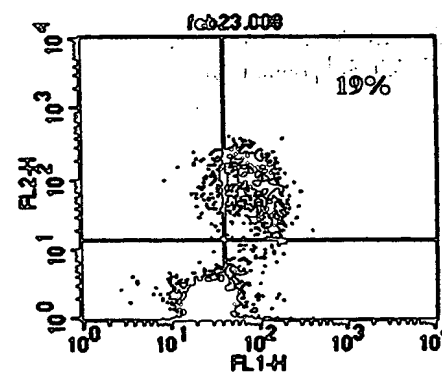
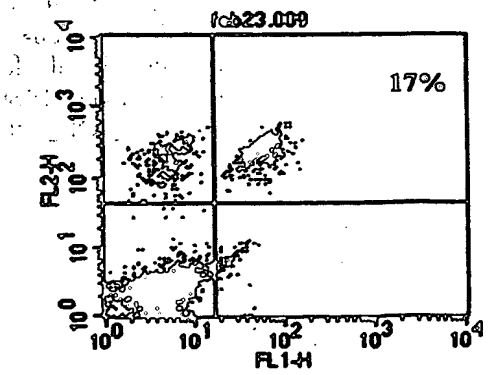


FIG. 11F



6B11-DynaI
+ TCM alone

6B11-DynaI
TCM + IL-7
+ IL-15

6B11-DynaI+
Dexamethasone

Vα24

6B11

V β11

FIG. 12

Miltenyi vs. Dynal 4/11/01			
	PBMC	Dynal @ 40	Miltenyi @ 20
Donor 1			
V α 24/6B11	0	8.46	4.53
V α 24/V β 11	0.01	4.85	4.71
V α 24		3.9	
Donor 2			
V α 24/6B11	0.01	0.99	5.91
V α 24/V β 11	0.01	1.47	6.16
V α 24		0.33	
Donor 3			
V α 24/6B11	0	N/A	71
V α 24/V β 11	0.03	N/A	72
V α 24			5.98
LKP 21 unsorted control			
V α 24/6B11	0.01		
V α 24/V β 11	0		

FIG. 13

Dynal Bead 1/19/01		
LKP 10 on 40 ug/ml 6B11 on TCM		
	V α 24/V β 11	32.98
	V α 24/6B11	32
LKP 10 on TCM + IL15/IL7		
	V α 24/V β 11	12.46
	V α 24/6B11	29
LKP 10 on TCM + dex		
	V α 24/V β 11	17.08
	V α 24/6B11	19
LKP 10 on TCM + IL15/IL7+dex		
	V α 24/V β 11	4.93
	V α 24/6B11	13.81

Fig. 11B

Fig. 11A

Fig. 11D

Fig. 11C

Fig. 11F

Fig. 11E

Fig. 10B

Fig. 10A

FIG. 14

Dynal 6B11 Bead Prep 3/9/01		
LKP 14 unsorted control		
3/20/01	V α 24/V β 11	0.02%
	V α 24/6B11	0.01%
LKP 14 6B11 + PHA + auto APC		
3/20/01	V α 24/V β 11	0.09%
	V α 24/6B11	0%
4/20/01	V α 24/V β 11	0.13%
	V α 24/6B11	0.00%
	V α 24	0.01%
LKP 14 6B11 + PHA + auto APC		
3/20/01	V α 24/V β 11	0.68%
	V α 24/6B11	0.02%
4/20/01	V α 24/V β 11	0.15%
	V α 24/6B11	0.00%
	V α 24	0.73%
4/27/01	alpha Gal Cer stim	
5/10/01	V α 24/V β 11	2.73%
	V α 24/6B11	2.94%
unsorted control		
	V α 24/V β 11	0.01%
	V α 24/6B11	0.01%
6B11 + PHA + auto APC		
4/20/01	V α 24/V β 11	3.64%
	V α 24/6B11	3.75%
5/10/01	V α 24/V β 11	5.01%
	V α 24/6B11	4.92%

FIG. 15

Dynal 6B11 Bead Prep 3/9/01		
LKP 13 unsorted control		
	V α 24/V β 11	0.07%
	V α 24/6B11	0.06%
LKP 13 6B11 + PHA + allo APC		
4/20/01	V α 24/V β 11	1.85%
	V α 24/6B11	0%
	V α 24	1.16%
5/10/01	V α 24/V β 11	14.29%
	V α 24/6B11	
unsorted control		
	V α 24/V β 11	0.01%
	V α 24/6B11	0.00%
6B11 + PHA + auto APC		
4/20/01	V α 24/V β 11	0.05%
	V α 24/6B11	0.06%
	V α 24	3.22%
6B11 + auto APC		
4/20/01	V α 24/V β 11	0.78%
	V α 24/6B11	0.00%
	V α 24	1%

FIG. 16

Miltenyi Prep #1 6B11		1/01
LKP2 +auto APC on TCM		
2/6/01	V α 24/V β 11	26.07%
	V α 24/6B11	21%
2/23/01	V α 24/6B11	10.79%
3/26/01	alpha Gal Cer stim	
4/20/01	V α 24/V β 11	73.40%
	V α 24/6B11	74.66%
4/27/01	alpha Gal Cer stim	
5/14/01	V α 24/V β 11	80.87%
	V α 24/6B11	79.98%
LKP2 +auto APC on TCM + IL7/IL15		
2/6/01	V α 24/V β 11	16%
	V α 24/6B11	11%
3/26/01	alpha Gal Cer stim	
4/20/01	V α 24/V β 11	54.28%
	V α 24/6B11	56.89%
4/27/01	alpha Gal Cer stim	
5/14/01	V α 24/V β 11	68.05%
	V α 24/6B11	68.85%
	V α 24	1.66%

FIG. 17

Miltenyi Prep #2		1/01	
LKP 11 on Va24 + auto APC + PHA			
2/23/01	V α 24/6B11	63.75%	
3/20/01	V α 24/V β 11	1.43%	
	V α 24/6B11	0.07%	
4/27/01	alpha Gal Cer stim		
5/10/01	V α 24/V β 11	24.78%	
	V α 24/6B11	14.94%	
LKP 11 on 6B11 + auto APC + PHA			
2/23/01	V α 24/6B11	45.27%	
LKP 12 on Va24 + auto APC + PHA			
2/23/01	V α 24/6B11	33.51%	
3/20/01	V α 24/V β 11	0.25%	
	V α 24/6B11	0.25%	
4/27/01	alpha Gal Cer stim		
5/14/01	V α 24/V β 11	0.00%	
	V α 24/6B11	0.00%	
	V α 24	55.00%	

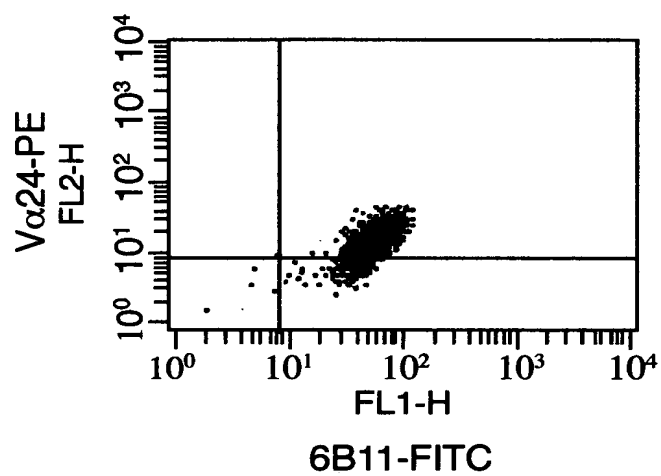
Fig. 10C

Fig. 10D

Fig. 10G

Fig. 10H

FIG. 18



[Faint, illegible text, likely bleed-through from the reverse side of the page]

FIG. 19A

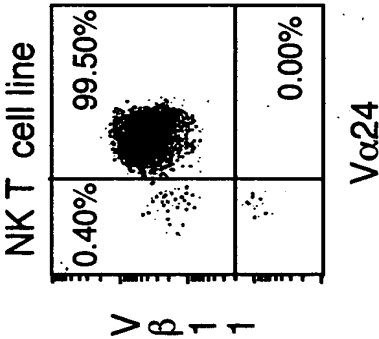


FIG. 19B

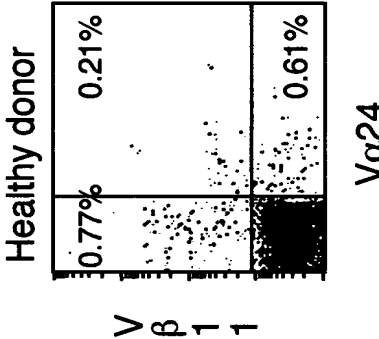


FIG. 19C

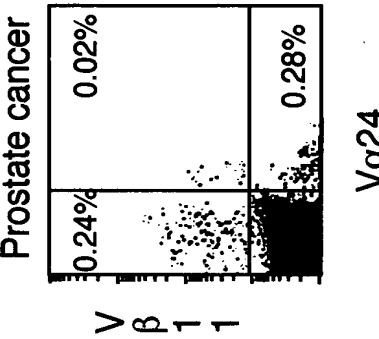


FIG. 19D

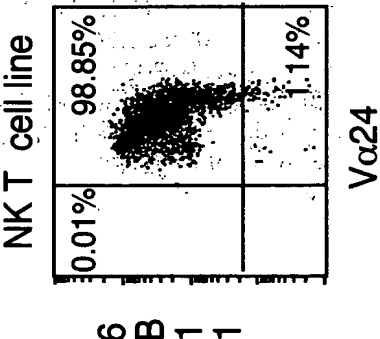


FIG. 19E

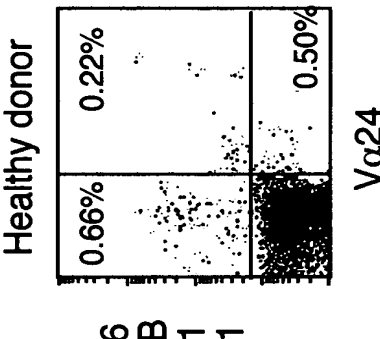


FIG. 19F

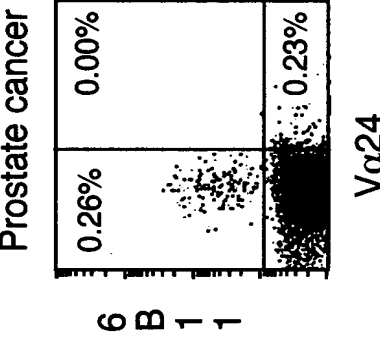


FIG. 20A

V α 24 sorted, PHA
expanded PBMC

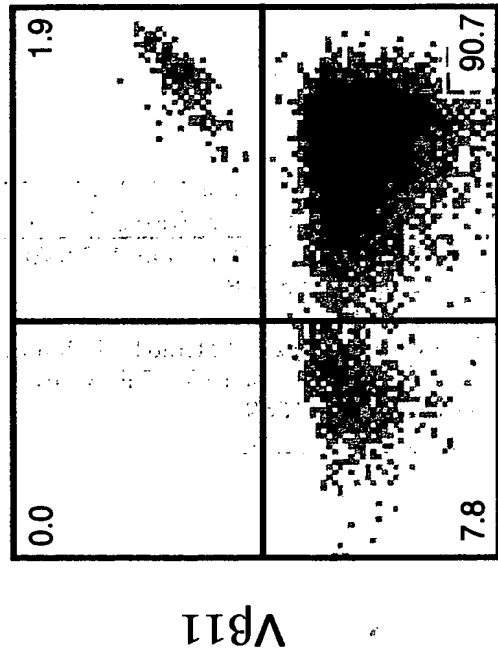


FIG. 20B

V α 24 sorted, α -GalCer
expanded PBMC

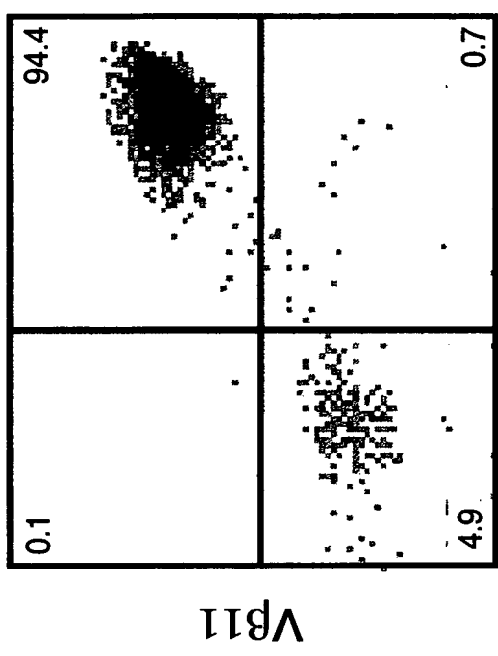


FIG. 20D

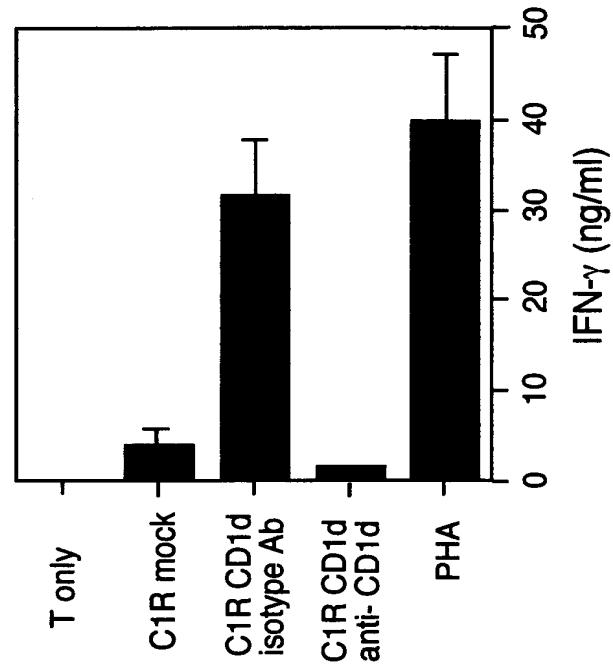


FIG. 20C

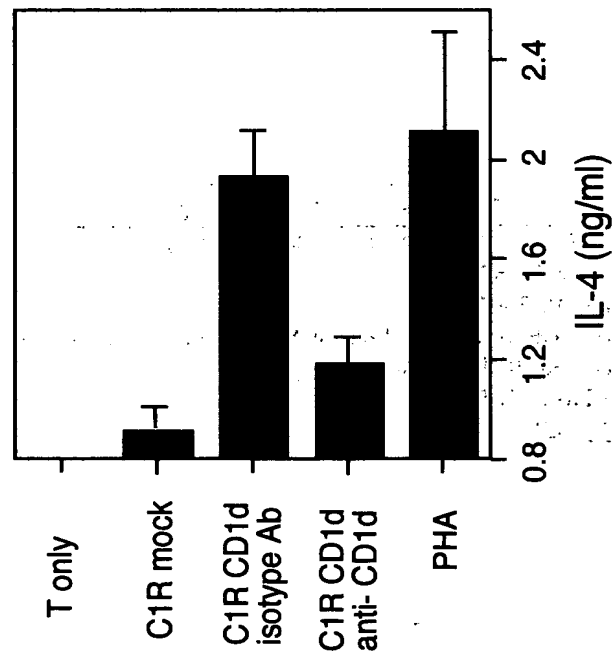


FIG. 21A

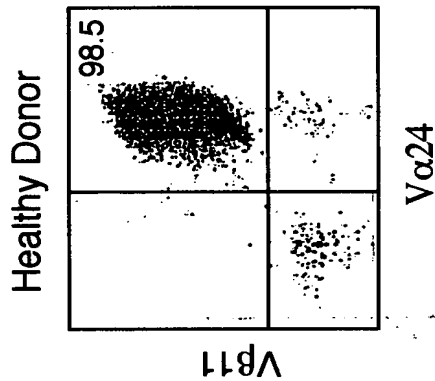


FIG. 21B

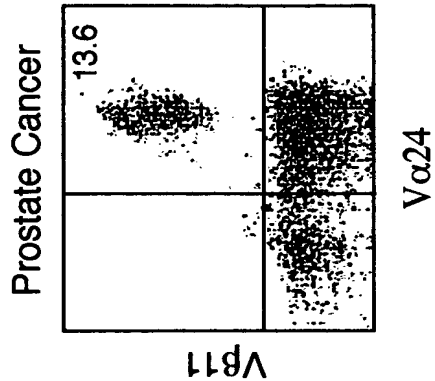


FIG. 21C

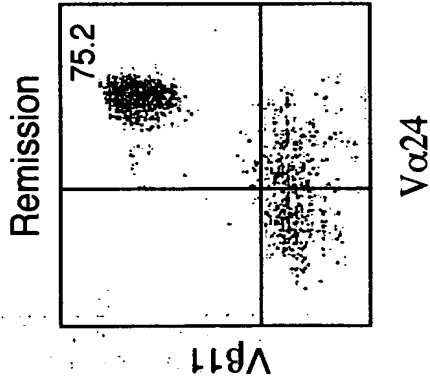


FIG. 21D

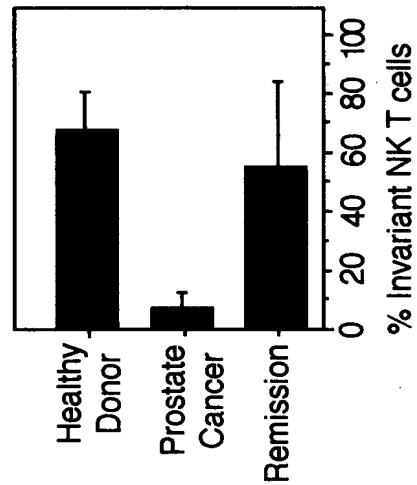


FIG. 22A

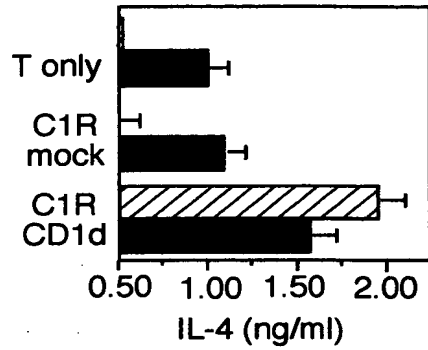


FIG. 22B

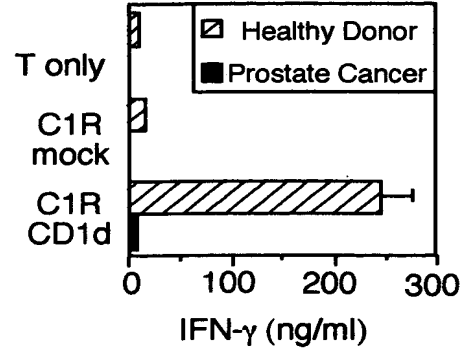


FIG. 22C

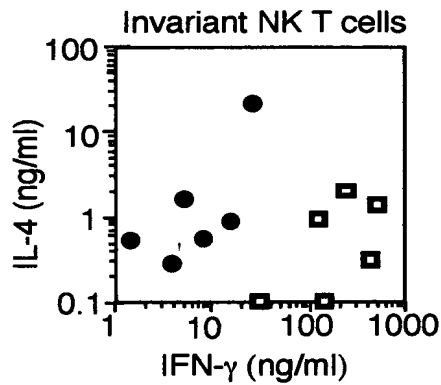


FIG. 22D

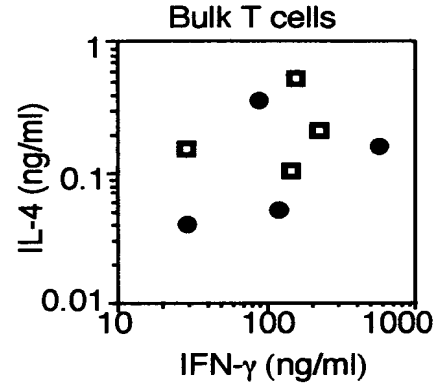


FIG. 22E

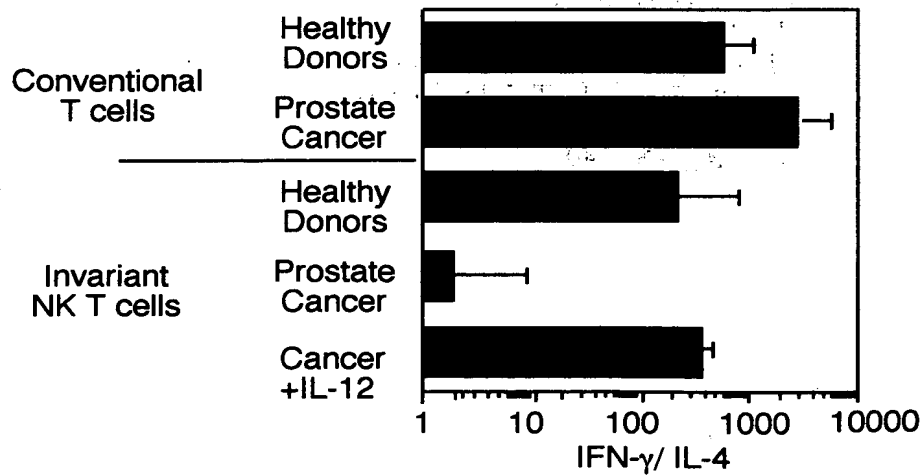


FIG. 23A

NK-T Dendritic Cell Study
Sero-Negatives

Date	Patient ID	Name	Serostatus	CD4 ABS	HIV copies/ml	Lymph Count	T-Cell Count	NK-T Count	% NK-T II Lymph	ABS Lymph	ABS NK-T	% NK-T II CD3	% CD123+ DC II Leuk	% CD11c+ DC II Leuk	WBC	ABS CD123+DC	ABS CD11c+DC
5/3/00	Yang		0			44728	27503	44	0.0984		0.0000	0.1600	***	***		***	***
5/9/00	91841		0	927		79175	64673	74	0.0935	1782	1.6655	0.1144	***	***	5400	***	***
5/11/00	42893		0			67709	47828	1	0.0015		0.0000	0.0021	***	***		***	***
5/18/00	91921		0	787		47660	32443	4	0.0084	1749	0.1468	0.0123	***	***	5300	***	***
5/24/00	91960		0	621		33001	26942	166	0.5030	1150	5.7847	0.6161	***	***	5000	***	***
5/25/00	91960*		0	621		33855	27347	206	0.6085	1150	6.9975	0.7533	***	***	5000	***	***
5/30/00	92001		0	898		65330	46630	48	0.0735	1632	1.1991	0.1029	***	***	4800	***	***
6/6/00	92065		0	735		61812	50967	15	0.0243	1634	0.3965	0.0294	***	***	3800	***	***
6/14/00	92145		0	796		84897	56717	26	0.0306	1768	0.5415	0.0458	***	***	5200	***	***
8/24/00	92673		0	821		76582	51494	45	0.0588	2160	1.2692	0.0874	0.170	0.320	4000	6.80	12.80
9/8/00	40211		0	1040		96769	78779	56	0.0579	2040	1.1805	0.0711	0.057	0.027	5100	2.93	1.37
9/8/00	92800		0	957		82627	63397	31	0.0375	1740	0.6528	0.0489	0.043	0.084	5800	2.47	4.85
1/24/01	42959		0	0		153419	112395	19	0.0124		0.0000	0.0169	0.032	0.051		0.00	0.00
1/25/01	40545		0	653		79252	44870	15	0.0189	1452	0.2748	0.0334	0.135	0.358	3300	4.47	11.81
1/25/01	40634		0	583		44101	36543	1	0.0023	1122	0.0254	0.0027	0.050	0.086	5100	2.55	4.39
1/31/01	41214		0	***		***	***	***	***	***	***	***	0.088	0.084		0.00	0.00
1/31/01	42888		0	***		***	***	***	***	***	***	***	0.073	0.062		0.00	0.00
2/1/01	40086		0	850		76313	67231	42	0.0550	1700	0.9356	0.0625	0.086	0.240	5000	4.31	11.98
2/1/01	40128		0	689		61816	47823	22	0.0356	1377	0.4901	0.0460	0.030	0.043	5100	1.54	2.21
2/22/01	40059		0			111766	85872	5	0.0045		0.0000	0.0058	0.040	0.085		0.00	0.00
2/28/01	41842		0			62325	48159	12	0.0193		0.0000	0.0249	0.111	0.264		0.00	0.00

Serostatus: 0=seronegative, 1=HIV-1infected, 2=HIV-1 Seroconverter, 3=AIDS

>0.02% NK-T cells II lymphs considered positive

*5/25/00 (91969 blood is 24 hrs. old)

FIG. 23B

NK-T Dendritic Cell Study
Sero-Positives

Date	Patient ID	Name	Serosatus	CD4 ABS	HIV copies/ml	Lymph Count	T-Cell Count	NK-T Count	% NK-T II Lymph	ABS Lymph	ABS NK-T	% NK-T II CD3	% CD123+ DC II Leuk	% CD11c+ DC II Leuk	WBC	ABS CD123+DC	ABS CD11c+DC
5/25/00	40263		1	635	2257	79350	50332	6	0.0076	1813	0.1371	0.0119	***	***	3700	***	***
6/1/00	41989		1	699	0	81811	63503	250	0.3056	2254	6.8878	0.3937	***	***	4600	***	***
6/14/00	40846		3	559	0	98766	74485	3	0.0030	2432	0.0739	0.0040	***	***	7600	***	***
6/15/00	45555		1	668	30300	93116	55888	11	0.0118	2088	0.2467	0.0197	***	***	7200	***	***
6/15/00	41400		3	199	167000	50249	43105	6	0.0119	1107	0.1322	0.0139	***	***	4100	***	***
8/28/00	42946		1	768	212000	76925	63905	12	0.0156	2193	0.3421	0.0188	0.070	0.260	5100	3.57	13.26
9/8/00	20461		1	671	308	181054	111247	3	0.0017	3726	0.0617	0.0027	0.023	0.023	8100	1.82	1.87
9/8/00	40177		1	658	0	73001	54950	8	0.0110	1530	0.1677	0.0146	0.027	0.090	5100	1.37	4.58
1/24/01	41411		2	977		108212	88856	34	0.0314	2640	0.8295	0.0383	0.151	0.266	6000	9.03	15.98
1/26/01	40360		2	***	***	***	***	***	***	***	***	***	0.083	0.132		0.00	0.00
2/7/01	41266		1	354		48310	35405	1	0.0021	1219	0.0252	0.0028	0.040	0.137	5300	2.14	7.28
2/7/01	40846		2	0		55088	46321	2	0.0036		0.0000	0.0043	0.078	0.139		0.00	0.00
2/8/01	41329		1	0		86792	78696	5	0.0058		0.0000	0.0064	0.072	0.075		0.00	0.00
2/8/01	42964*		(unknown)	0		62696	52449	10	0.0159		0.0000	0.0191	0.031	0.038		0.00	0.00
2/14/01	42946		(unknown)	0		103913	83889	54	0.0520		0.0000	0.0644	0.039	0.124		0.00	0.00
2/22/01	41977		1			121798	95033	25	0.0205		0.0000	0.0263	0.022	0.029		0.00	0.00
3/1/01	40605		4			86319	71338	29	0.0336		0.0000	0.0407	0.088	0.092		0.00	0.00

Serosatus: 0=seronegative, 1=HIV-1infected, 2=HIV-1 Seroconverter, 3=AIDS
 >0.02% NK-Tcells II lymphs considered positive

*5/25/00 (91969 blood is 24 hrs. old)

FIG. 23C

[illegible]

FIG. 23D

Date	Patient ID	Serostatus	CD4 ABS	HIV copies/ml	Lymph Count	T-Cell Count	NK-T Count	% NK-T II Lymph	% NK-T II CD3	CD123+ DC II Leuk	CD11c+ DC II Leuk
9/8/99	20461	1	671	308	181054	111237	3	0.0017	0.0027	0.02	0.02
5/25/00	40263 Visit 330	1	635	2257	79350	50332	6	0.0076	0.0119		
6/15/00	45555 Visit 335	1	668	30300	93116	55888	11	0.0118	0.0197		
6/15/00	41400 Visit 330	3	199	167000	50249	43105	6	0.0119	0.0139		
8/28/00	42946	1	768		76925	63905	12	0.0156	0.0188	0.07	0.26
9/8/99	40177	1	658	0	73001	54946	8	0.0110	0.0146	0.03	0.09
6/1/00	41989 Visit 335	1	699	0	81811	63503	250	0.3056	0.3937		
6/14/00	40846 Visit 330	3	559	0	98766	74485	3	0.0030	0.0040		
	mean				91784	64675.13	37.375	0.046018798	0.05990837	0.04	0.123333333
	SD				38863.254	21074.95	85.97664	0.104985353	0.13500524	0.026457513	0.123423391
	SN vs SP/Undetect				0.2719675	0.294514	0.016718	0.084419635	0.06891274	0.414444189	0.984173536
	SN vs SP/Undetect				0.0907158	0.042664	0.752949	0.934380609	0.9172846	0.445328944	0.815483198
	SP/Undetect vs SP/Undetect	0.479			0.5857258	0.959285	0.390795	0.390489333	0.39541498	0.890843778	0.836166008
	SN vs SP/All				0.1335716	0.118728	0.77884	0.434584864	0.40972451	0.343667848	0.870121379

Serostatus: 0=HIV-1 seronegative, 1=HIV-1 infected, 3=AIDS
> 0.02% NK-Tcells II lymphs considered positive

FIG. 24

: Percent of cells expressing both markers out of the total number of cells collected									
Run	Control	New Onset	Control	New Onset	Control	New Onset	Control	New Onset	
	6B11FC	6B11FC		6B11FC		6B11FC		VB11PE	VB11PE
1	0.02	0.07	VB11PE	0.03	0.03	0.08	VA24FC	0.04	0.05
2	0.10	0.17		0.13	0.13	0.28		0.05	0.08
3	0.05	0.17		0.00	0.00	0.23		0.04	0.22
4	0.06	0.33		0.03	0.03	0.32		0.09	0.26
5	0.03	0.03		0.02	0.02	0.00		0.03	0.00
6	0.06	0.23		0.08	0.08	0.21		0.09	0.23
7	0.06	0.09		0.08	0.08	0.14		0.08	0.12
Avg.	0.05	0.16	Avg.	0.05	0.05	0.18	Avg.	0.06	0.14
Std. Dev	0.03	0.10	Std.Dev.	0.05	0.05	0.11	Std. Dev.	0.03	0.10
Table 1: Percent of cells expressing both markers out of the gated population									
Run	Control	New Onset	Control	New Onset	Control	New Onset	Control	New Onset	
	6B11FC	6B11FC		6B11FC		6B11FC		VB11PE	VB11PE
1	0.02	0.08	VB11PE	0.03	0.03	0.09	VA24FC	0.04	0.06
2	0.11	0.17		0.14	0.14	0.30		0.06	0.09
3	0.06	0.19		0.00	0.00	0.25		0.05	0.24
4	0.07	0.34		0.03	0.03	0.33		0.10	0.27
5	0.05	0.04		0.04	0.04	0.00		0.04	0.00
6	0.07	0.29		0.10	0.10	0.27		0.11	0.29
7	0.07	0.12		0.09	0.09	0.17		0.09	0.15
Avg.	0.06	0.18	Avg.	0.06	0.06	0.20	Avg.	0.07	0.16
Std. Dev	0.03	0.11	Std.Dev.	0.05	0.05	0.12	Std. Dev.	0.03	0.11
	0.03506137			0.021871				0.088943	

FIG. 25A

Table 1. Genes differentially expressed between natural killer T cell clones ME10 and GW4

Functional category	Accession no.	Common name	Cluster (row, column)	Functional category	Accession no.	Common name	Cluster (row, column)
Surface receptor	U38276	Semaphorin III	(1,1)		V00536	IFN- γ	(1,2)
	U82169	Frizzled	(1,1)		M13207	GM-CSF	(1,2)
	M32315	TNF-R	(1,2)		M16441	TNF- α	(1,2)
	U03397	4-1BB	(1,2)		X02910	TNF- α	(1,2)
	S77812	VEGF-R	(1,2)		X04688	IL-5	(1,2)
	X01057	IL-2R α	(1,2)		U31120	IL-13	(1,2)
	Y00285	IGF-R II	(1,2)		M37435	M-CSF	(1,2)
	L08096	CD27	(1,2)		U02020	PBEF	(1,2)
	Z30426	CD69	(1,2)		U37518	TRAIL	(1,2)
	U76764	CD97	(1,2)		U46461	Dishevelled homolog	(1,2)
	U60800	CD100	(1,2)		M90391	IL-16	(2,3)
	M24283	Rhinovirus-R	(1,2)	Nuclear protein	U73477	Nuclear pp32	(1,1)
	U19906	Arginine vasopressin-R	(1,2)		U62962	Int-6	(1,2)
	Z48042	p137	(1,2)		L25931	Lamin B receptor	(1,3)
	D79206	Ryudocan	(1,3)		M17733	Thymosin- β 4	(2,3)
	HT3125	CD44	(1,3)	Transcription factor	M69043	I κ B α	(1,2)
	L39064	IL-9R	(2,1)		X58072	GATA-3	(1,2)
	X14046	CD37	(2,1)		U43185	STAT-5A	(1,2)
	L31584	EBI-1	(2,1)		X51345	Jun-B	(1,2)
	X97267	LPAP	(2,1)		X56681	Jun-D	(1,2)
	M33680	TAPA-1	(2,2)		U15460	B-ATF	(1,2)
	M63175	AMFR	(2,2)		HT4899	C-myc	(1,2)
	U60975	gp250	(2,2)		L00058	C-myc	(1,2)
	Z50022	C21orf3	(2,2)		M13929	C-myc	(1,2)
	U90546	Butyrophilin BT4	(2,3)		U26173	NF-IL3A	(1,2)
	U90552	Butyrophilin BT5	(2,3)		M97796	Id-2	(1,2)
	X96719	ALCL	(2,3)		M96843	Id-2B	(1,2)
Cytoskeleton	U80184	Flightless I homolog	(1,1)		D14826	CREM	(1,2)
	X00351	β -Actin	(1,2)		S68271	CREM	(1,2)
	U20582	Actin-like peptide	(1,2)		J03827	Y box BP	(1,2)
	X82207	β -Centractin	(1,2)		U09412	ZNF134	(1,2)
	X98534	VASP	(1,2)		U13044	NRF-2 α	(1,2)
	D83735	Calponin	(2,1)		U22431	HIF-1 α	(1,2)
	J00314	β -Tubulin	(2,3)		X78925	HZF-2	(1,2)
	M21812	Myosin LC	(2,3)		Z47727	RNA POL2K	(1,2)
	X98411	Myosin-IE	(2,3)		J04076	EGR-2	(1,3)
Kinase/phosphatase	X79510	PTP D1	(1,1)		D61380	DJ-1	(1,3)
	L10717	ITK	(1,2)		HT4567	PC4	(1,3)
	X60673	AK3	(1,2)		HT4921	BTF-3 homolog	(2,1)
	X85545	PKX-1	(1,2)		L41067	NFAT-4C	(2,3)
	D13720	LYK	(1,2)		L78440	STAT-4	(2,3)
	HT1153	Nm23-H25	(1,2)		M82882	ELF-1	(2,3)
	M30448	CK II β	(1,2)		M83667	NF-IL6	(2,3)
	M90299	Glucokinase	(1,2)	Signal transduction	HT5108	TRAP-3	(1,1)
	U08316	ISPK-1	(1,2)		X80200	MLN62	(1,1)
	X80910	PPP1CB	(1,2)		U20158	SLP-76	(1,2)
	X93920	DUSP-6	(1,2)		U26710	Cbl-b	(1,2)
	U24152	PAK-1	(1,3)		D78132	RHEB	(1,2)
	D11327	PTPN7	(1,3)		M63573	SCYLP	(1,2)
	U15932	DUSP-5	(1,3)		M75099	FK506 BP	(1,2)
	L16862	GRK-6	(2,1)		Z35227	TTF	(1,2)
	L27071	TXK	(2,1)		U19261	EBV-independent	(1,3)
	J03805	PPP2CB	(2,2)		M28209	RAB-1	(2,2)
RNA Metabolism	HT3678	CLK-1	(2,3)		D78577	14-3-3-Eta	(2,3)
	U66464	HPK-1	(2,3)		X89399	Ins(1345)P4 BP	(2,3)
	X62535	DAG kinase	(2,3)	RNA Metabolism	D38251	RNP B5	(1,1)
	M31724	PTP-1B	(2,3)		U90547	RNP homolog	(1,1)
Cytokine	U89922	LT- β	(1,1)		X17567	RNP B	(1,2)
	J00219	IFN- γ	(1,2)		M29064	RNP B1	(1,2)

FIG. 25B

Functional category	Accession no.	Common name	Cluster (row, column)
	HT110	RNP A/B	(1,2)
	Z23064	RNP G	(1,2)
	HT3238	RNP K	(1,2)
	X52979	RNP SmB	(1,2)
	U15009	RNP SmD3	(1,2)
	X85372	RNP Sm F	(1,2)
	U30827	SF SRp40	(1,2)
	X70944	SF (PTP-associated)	(1,2)
	M60858	Nucleolin	(1,2)
	U10323	NF45	(1,2)
	U38846	Stimulator of TAR	(1,2)
	X59417	PROS-27	(1,2)
	X59892	IFN-independent $\gamma 2$	(1,2)
	X66899	EWS	(1,2)
	X71428	fus	(1,2)
	X72727	Tunp	(1,2)
	X75755	PR264	(1,2)
	Z24724	Poly A site	(1,2)
	L28010	RNP F	(1,3)
	HT4788	RNP I	(1,3)
Apoptosis	L03532	M4	(1,3)
	U69546	RNA BP	(2,3)
	Z23115	Bcl-X _L	(1,2)
	U45878	IAP-1	(1,2)
	U11821	Fas ligand	(1,2)
Chemokine	S81914	IEX-1	(1,2)
	U37546	MIHC	(1,2)
	M23178	MIP-1 α	(1,2)
	J04130	MIP-1 β	(1,2)
	M69203	MCP-1	(1,2)
Protein metabolism	L19686	MIF	(1,3)
	D28473	ILE-tRNA synthase	(1,2)
	U09510	GLY-tRNA synthase	(1,2)
	L25085	Sec61- β	(1,2)
	X74801	Chaperonin cctg	(1,2)
	X77584	Thioredoxin	(1,2)
	Y00281	Ribophorin I	(1,2)
	Y10807	ARG-methyltransferase	(1,3)
	D13748	EIF-4A1	(1,3)
	X55733	EIF-4B	(2,1)
	X76648	Glutaredoxin	(2,3)

Genes populating the six expression clusters for the 11 gene functional categories shown in Fig. 2 are listed. Each gene is identified by GenBank accession no. [or The Institute for Genomic Research (TIGR) identifier for HT designations], followed by a common name and the specific cluster into which it fell (row, column).

FIG. 25C

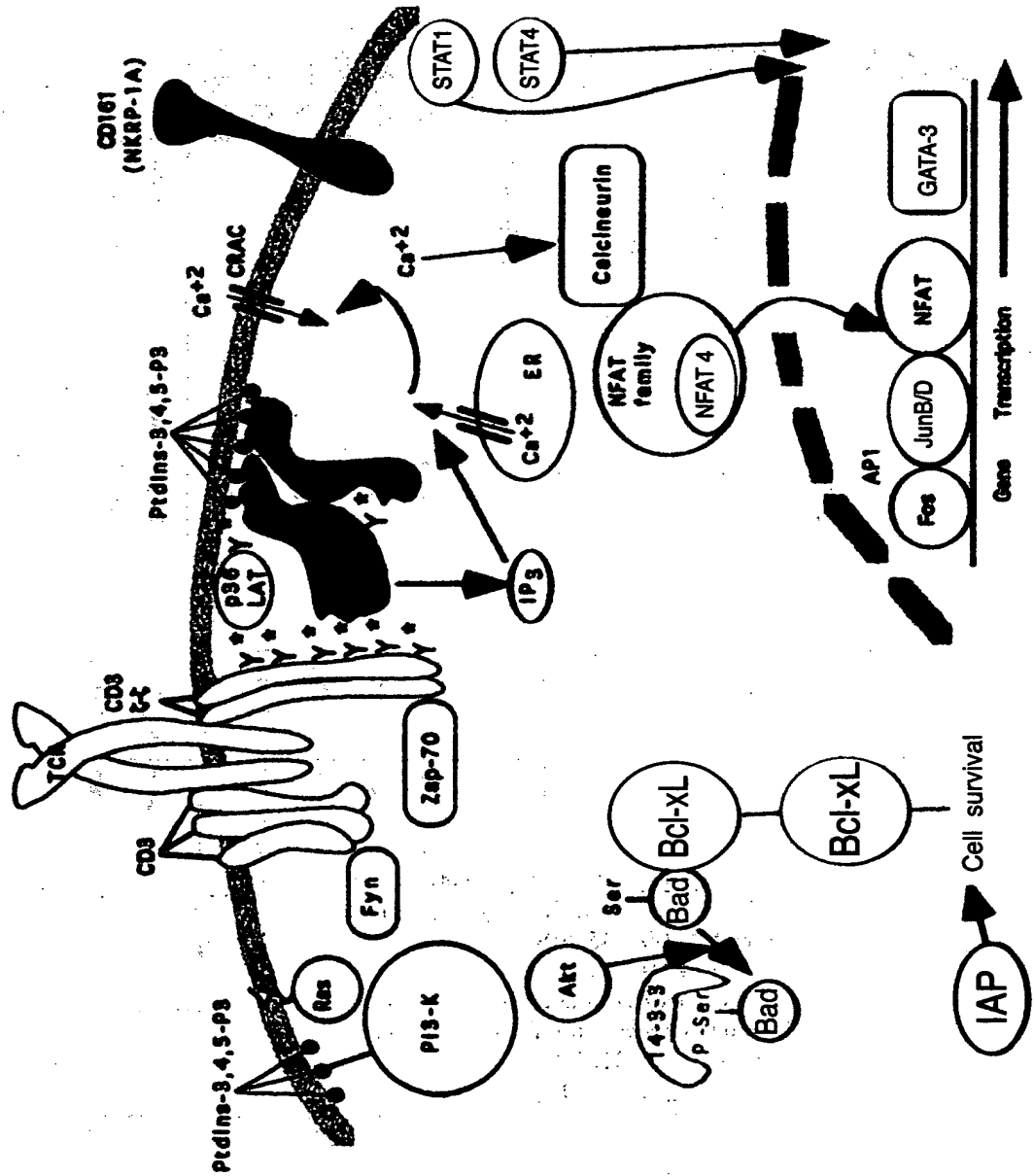


FIG. 26B

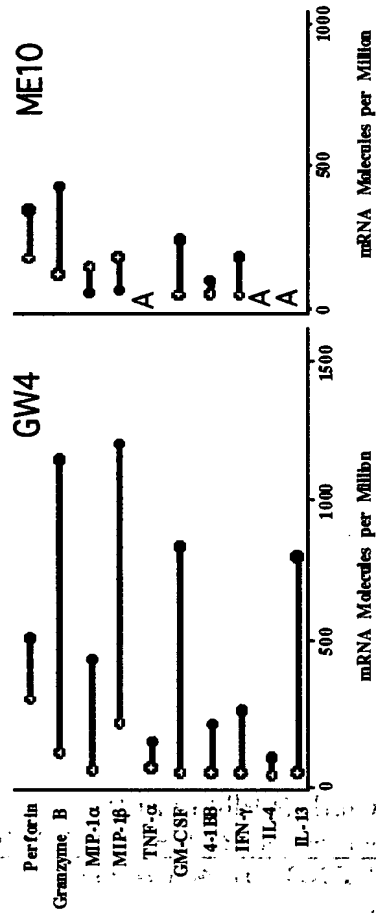


FIG. 26A

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FIG. 26 C

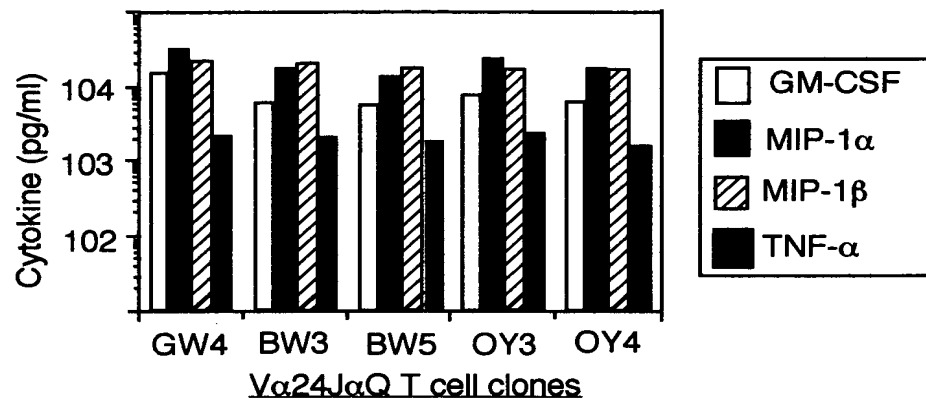


FIG. 26D

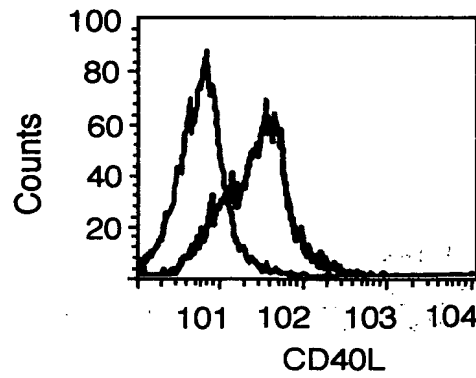


FIG. 27A

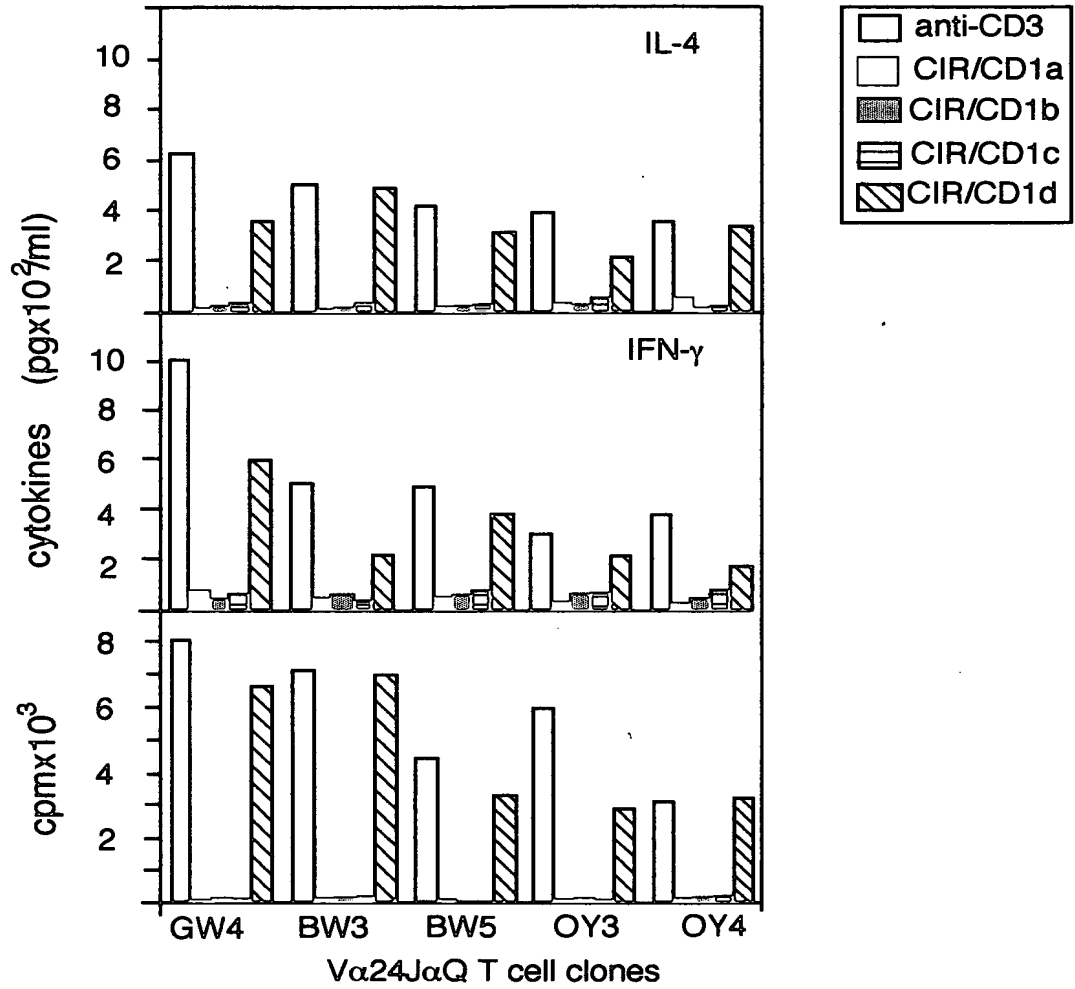


FIG. 27 B

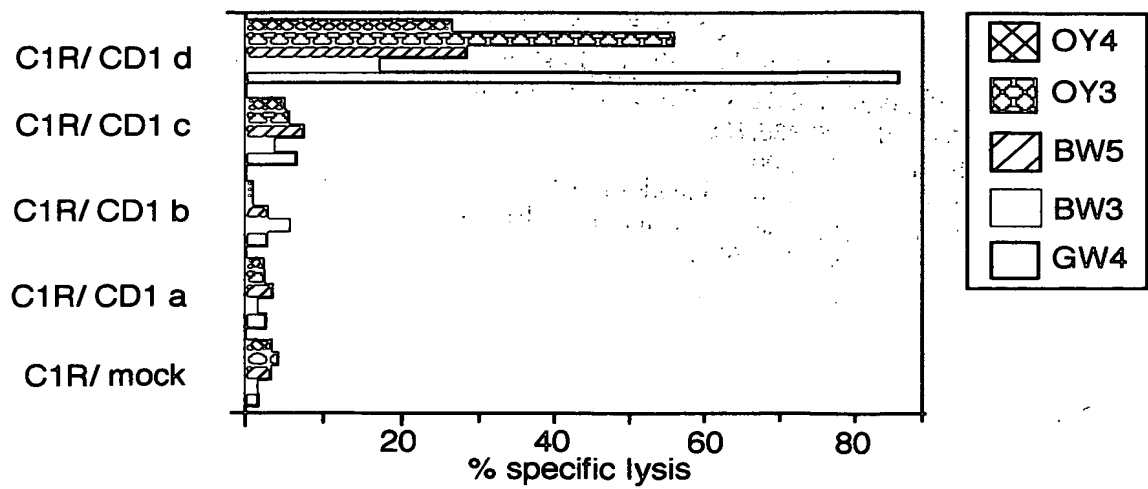


FIG. 28B

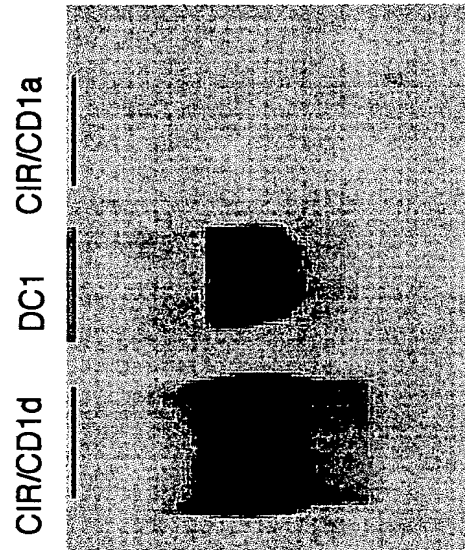


FIG. 28A

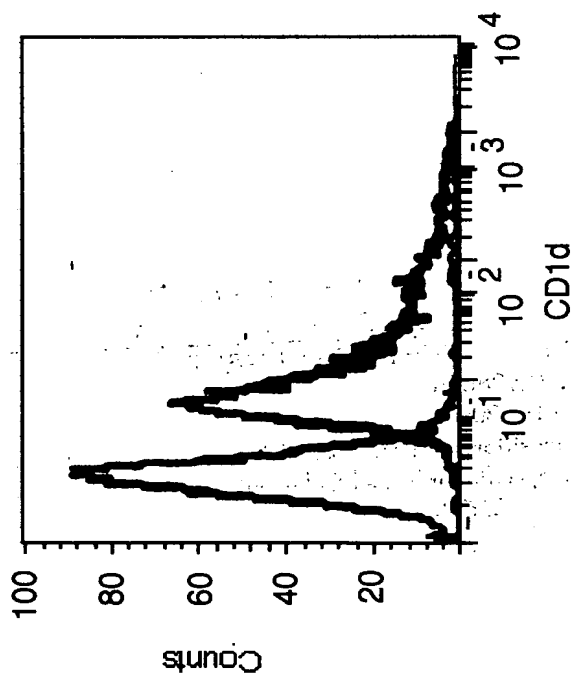


FIG. 28C

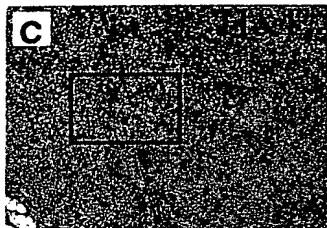


FIG. 28D



FIG. 28E

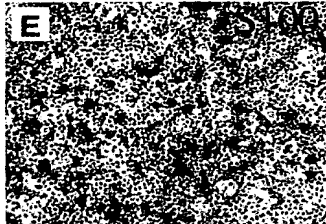


FIG. 28F

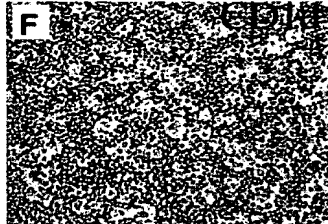


FIG. 28G

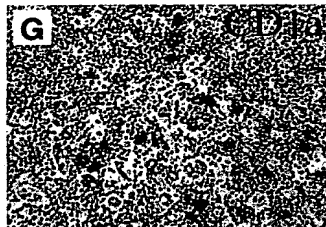


FIG. 28H

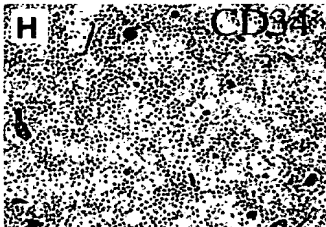


FIG. 28I



FIG. 28J



FIG. 28K



FIG. 28L

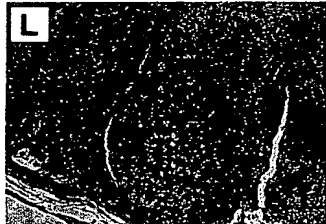


FIG. 28M

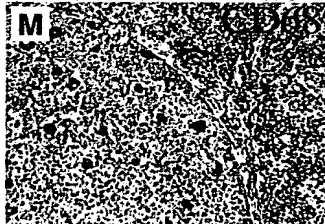


FIG. 28N

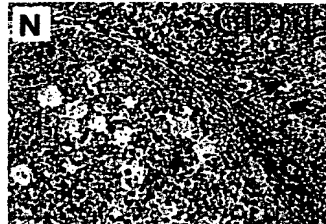


FIG. 29A

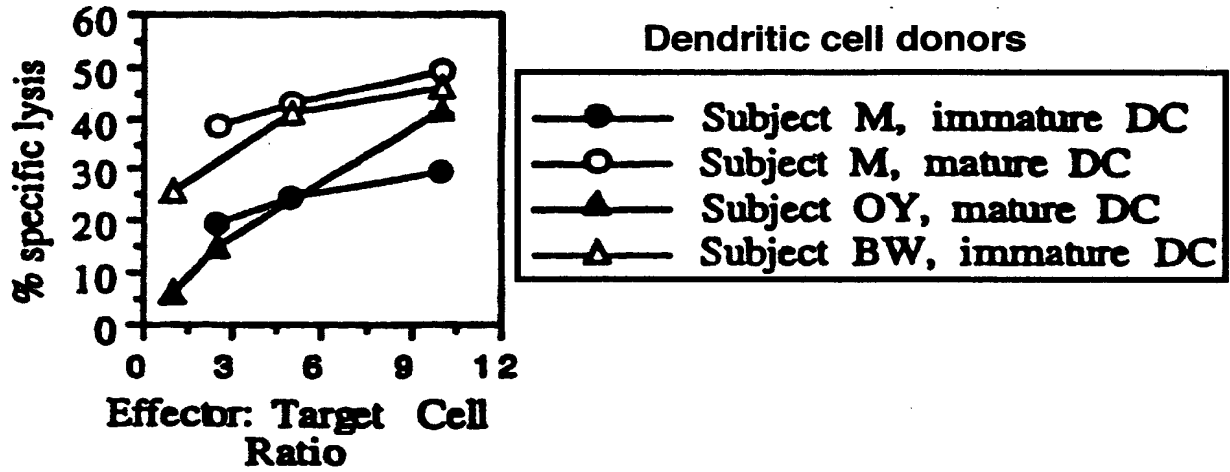


FIG. 29B

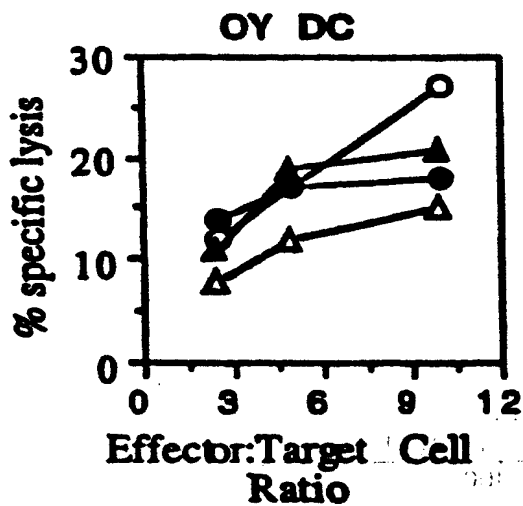
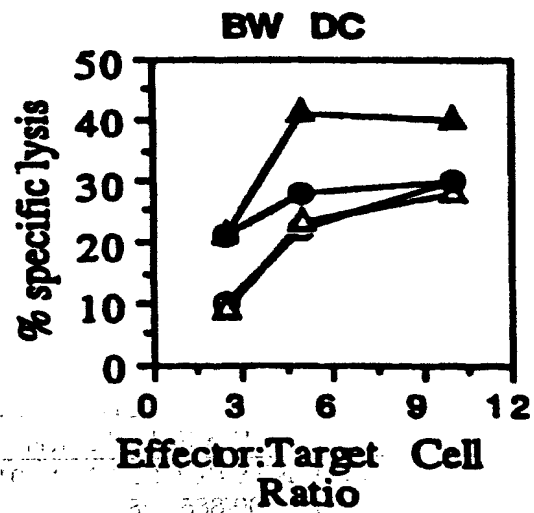


FIG. 29C



Vα24JαQ T cell clones

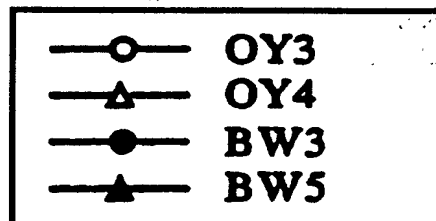


FIG. 30

